

digital image. If the image is sampled at a lower frequency aliasing is produced in the resulting sampled image. To summarize, the present invention is a spatial filter which removes or blurs the higher frequencies in the image, thereby preventing aliasing in the final image, rather than a spectral filter as in Fukushima. The total light power remains essentially unchanged by the filter. The blurring is achieved by redistribution of the light.

The Examiner has rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Greivenkamp, Jr. '193 and Fukushima et al. (5,646,399). This rejection is respectfully traversed.

The Fukushima '399 reference is for a tunable filter module. This filter module, which splits a first beam and a second beam to the side, varies the center wavelength in the passband according to the center wavelength of the input light. Once again this is significantly different from the spatial filter in the present invention. The fact that Fukushima '399 mentions lithium niobate and lithium tantalate as possible materials to use in the tunable filter modulator does not make it readily obvious to use these materials in a spatial filter. A variety of materials is used throughout the optical industry which includes microscopes, telescopes, tunable filters, spectral filters and spatial filters. The fact that a particular material is used in one optical application does not mean that an inventor would pull that material out randomly from another apparatus merely because it is used in the optical industry.

The Examiner's comment that "lithium tantalate may also make the device useful in applications such as multiplexing and/or demultiplexing," is merely hypothetical. Lithium tantalate may or may not be useful in multiplexing and/or demultiplexing. Add to the fact that the comment is a hypothetical, the fact that multiplexing and demultiplexing removes certain wavelengths whereas the present invention blurs higher wavelengths into different spots for the purpose of preventing aliasing in digital images as discussed above.

The Examiner has rejected claims 5 and 14 under 35 U.S.C. 103(a) as being unpatentable over Greivenkamp, Jr. '193 and Fukushima '420 as applied to claim 1 above, and further in view of Takatori et al. (U.S. 5,715,085). This rejection is respectfully traversed.

Claim 14 has been cancelled. Claim 5 is a dependent claim, which adds additional limitations to an independent claim already distinguished from the prior art and which is also, therefore, patentable over the prior art.

The Examiner has rejected claim 13 under 35 U.S.C. 103(a) as being unpatentable over Greivenkamp, Jr. '193 and Fukushima '399, and further in view of Watanabe et al. (U.S. 3,784,734). This rejection is respectfully traversed.

The Watanabe et al. reference cited by the Examiner is different from the present invention as further defined in claim 3 in that the rhomboidal pattern is not "rotated about an optical axis of the imaging apparatus." This distinction combined with the fact that it is a dependent claim, which adds additional limitations to an independent claim clearly distinguished from the prior art above indicates claim 13 is patentable over the prior art.

CONCLUSION

The Examiner is respectfully requested to enter this amendment to put the application in better form for appeal to the Board of Appeals and Interferences. The Examiner is requested to grant an in person interview to Applicant and Applicant's attorney to discuss reasons for the amendment and to distinguish the claims of the present invention over the prior art cited.

Respectfully submitted,



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